

SINAMICS S120 - Planning and Engineering (DR-S12-PL)

Objectives

You design and engineer motion control drives with highly dynamic performance using the SINAMICS S120 converter system. Special emphasis is placed on dimensioning a servo motor and the power unit - as well as the common infeed for multiple axes. In this course you will learn about the interrelationships between the specified load cycle and the static and dynamic data of the drive. Precise calculations are supported by the SIZER engineering software. After the course, you will be able to quickly and reliably engineer multi-axis drive systems based on the SINAMICS S120.

Target Group

Planners, Decision makers, Sales personnel

Content

Design and principle of operation of the multi-axis SINAMICS S120 converter system

Fundamentals of mechanical and electrical calculations:

- Load diagrams of motion control drives
- Influence of gearbox ratio and moment of inertia
- Overload capability, DC link power, regenerative feedback (energy recovery), line connection

Selecting all the components for a complete drive system

Configuring using the SIZER software and catalog data:

- Entering data for mechanical systems and complex load cycles
- Calculating and selecting the optimum motor and power unit
- Calculating and configuring multi-axis drive systems

Influence of the controlled infeed on the DC link and energy balance

Configuring and engineering notes for chassis and cabinet units

Overview of interfaces, drive functions and Safety Integrated

Practical exercises with the SIZER engineering software

Prerequisites

Basic knowledge of drive engineering

Knowledge of the SINAMICS S120 product range as learned in the DR-SYS training course is helpful

Note

To be able to select the optimum motor, we also recommend the DR-MCM-PL training course (SIMOTICS Motion Control Motors - Planning and Configuring)

When booking this training course, you will also be authorized to participate in the WT-GAT-M and WT-GAT-U web-based training courses (Fundamentals of drive technology).

Type

Face-to-face training

Duration

5 days

Language

en